

## **WHY ADOPT AN ORDINANCE TO PROTECT GROUNDWATER?**

### **Reasons for Protecting the Resource**

Redmond has the good fortune of having high quality groundwater that is adequate to supply approximately 40% of the City's drinking water needs. Maintaining this resource provides significant benefits to the citizens of Redmond including:

- Groundwater is a more cost effective source of drinking water – at one-third the cost of purchasing water from the Seattle water supply. (Utilizing groundwater saves the City about \$1.5 million annually. With Seattle's projected rate increases, savings could be higher).
- Groundwater provides the City with an alternative water supply that can supplement surface water supplies in times of need or crisis.
- Seattle Public Utilities, the chief supplier of drinking water to the City of Redmond, has notified Redmond that it will no longer supply wholesale water to the City after 2010. (Maintaining our groundwater supply provides us with greater leverage in regional water supply issues).

### **Requirements to Maintain the Resource**

Not only does maintaining our groundwater provide significant benefits to our citizens, but the law also requires it. As a water service provider, the City of Redmond is required to protect public health and safety by preventing contamination of aquifers used by the City or its successors as drinking water sources.

- The Washington State Department of Health requires that the City develop a Wellhead Protection Program to fulfill the public water system requirements of Chapter 246-290 WAC.
- The 1986 and 1996 Amendments to the Safe Drinking Water Act (SDWA) emphasize source water protection and require municipal water purveyors using groundwater to develop wellhead protection plans and submit source water assessment programs (SWAP).
- The State Department of Health requires that Susceptibility Assessments be generated as part of the Wellhead Protection Plans mandated under WAC 246-290.
- The Growth Management Act requires all cities and counties to identify and pass ordinances to protect critical areas, including aquifer recharge areas (RCW 36.70A), and mandates that Best Available Science be used in designating and protecting critical areas (RCW 36.70A.172).

While the City of Redmond has met most of the state and federal requirements as a designated water purveyor, the City has yet to adopt an ordinance that secures the protection and safety of the groundwater resource.

### **Susceptibility of the Resource to Contamination**

Redmond's five water supply wells are located in the heart of Redmond's downtown and southeast industrial areas. Because of their location and the type and intensity of land use, the wells are highly susceptible to contamination. All of Redmond's wells draw water from a highly permeable soil layer less than 70 feet below the ground surface. Nearly all of Redmond's drinking water wells have been affected by groundwater contamination at some time. An inventory conducted in 1997 identified more than 70 contaminated and potentially contaminated sites throughout the City that could adversely impact the City's drinking water supply.

With the numerous benefits associated with maintaining the groundwater supply, the mandates required to protect the resource, and the resource's high susceptibility to contamination, the City recognized the need to develop a groundwater program to ensure the integrity and long-term protection of the groundwater resource.